

THE BEE GENUS *THRINCHOSTOMA* IN INDIA.

BY F. W. L. SLADEN,

Apiarist, Central Experimental Farm, Ottawa.

(This paper was submitted to Prof. Cockerell in March, 1915, who kindly added the valuable notes given in brackets.—F.W.L.S.)

Prof. T. D. A. Cockerell's description, on pages 35 and 36 of Vol. XLV of the Canadian Entomologist, as a new species, of a male and female of this curious genus that I recently sent him in a box of bees, has led me to examine the remainder of my specimens.

I find that the male and female described by Prof. Cockerell belong to two different species, for, besides a male that agrees fairly well with his description of *T. sladeni*, there is a male of a different species that evidently is the true mate of a female I possess that agrees fairly well with Prof. Cockerell's description of the female of *T. sladeni*.

My supposed male of *T. sladeni* agrees with Prof. Cockerell's description of the male in having the head and thorax clothed with white hairs, the margin of the clypeus cream-coloured, the legs red-brown, with the various creamy-white markings described, and in minor details, but it carries at the base of the 5th ventral segment of the abdomen, on either side of the middle, a cluster of three-hooked spines. The spines are arranged in a transverse line, the inner spine is the longest and the outer one the shortest. This remarkable and important structure is not mentioned in Prof. Cockerell's description.

The male of the other species, for which I propose the name *T. assamensis*, has also a transverse row of erect hooked spines at the base of the 5th ventral segment, but they number eight instead of six and are nearly equidistant and of equal length. This male, agrees with the female of mine that I refer to this species, and also with the female described by Prof. Cockerell under *T. sladeni*, in every important detail that is not sexual. In addition, it possesses in common with my female another remarkable character not mentioned by Prof. Cockerell. The second transverse cubital nervure does not reach to the radial nervure. [It does in my female, however.—T. D. A. C.]

The figure of *Halictus wroughtoni* Cameron shown on page 432 of Bingham's Hymenoptera of India, Vol. I (Fauna of British

India, 1897), is that of a male *Thrinchostoma*, allowing for engraver's errors. - But, unfortunately, Bingham's accompanying description, which is of the female, is meager. In the colouring of the clypeus and legs and the structure of the base of the propodeum it agrees with *T. sladeni*, but in the colouring of the wing nervures with *T. assamensis*.

[*Assamensis* appears to be near to *T. macrognathum* (Friese) from Java, which (♂) has "Clypeus gelbbraun jederseits an Rande mit schwarzer Beule." Head and thorax yellow-haired. "Beine gelblich, gelbbraun behaart." Long 9-10 mm.; ♀ not known.

Friese redescribes your Khasia Hills insect as *sladeni*, using same ♀ and ♂ forms as I had. (Tijdschrift voor Entomologie, LVII (1914), p. 27.) Friese makes a subgenus (of *Halictus*) *Rostratilapis* for *macrognathum* and *sladeni*.—T. D. A. C.]

***Thrinchostoma assamensis*,  
n. sp.**

♂.—Length 13 mm. (head extended), expanse 21 mm. Head and thorax black, clothed with short pale fulvous hair; inner margins of the eyes concave; clypeus greatly extended, more so than in *T. sladeni*, clear yellow; supra-clypeal area piceous; malar space piceous, its extremity yellow; mandibles yellow, their tips piceous; labrum yellow; clypeus very shining, coarsely and remotely punctured; supra-clypeal space more closely and finely punctured; antennae piceous; apex of scape paler; upper part of front finely and shallowly punctured, almost impunctate in the region of the ocelli; propodeum rounded

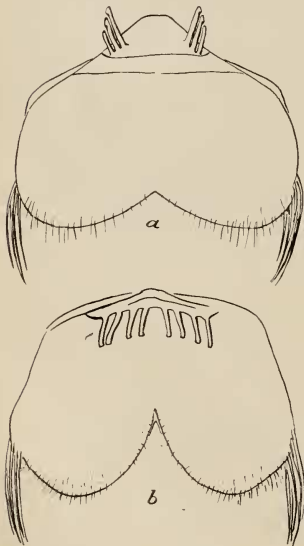


Fig. 25.—(See p. 215.)

impunctate in the region of the ocelli; propodeum rounded

longitudinally rugose at the base; tegulae testaceous. Wings hyaline, yellowish; nervures, stigma and hairs on wings pale testaceous; the first recurrent nervure joins the second submarginal cell before the end. Legs entirely testaceous-yellow; hind femora not much thickened, concave beneath; lobe on hind tibiae wider than in *T. sladeni*. Abdomen has the first segment testaceous blackened in the centre and on either side at the base; second segment testaceous, with a transverse black band not narrowed in the middle; remaining segment black; as in *T. sladeni*, broad apical bands of shining white hair are noticeable in some lights on segments 3 to 5; abdomen shining, the basal segment impunctate; the dull, closely-punctured area on either side of the 2nd segment near the middle, present in *T. sladeni*, is absent; beneath, segments 1 to 4 pale; segments 5 and 6 black; segment 5 bilobate (in *T. sladeni* it is merely emarginate), bearing at its base a transverse row of erect hooked spines, eight in number, equal in length and nearly equidistant

♀.—Described by Cockerell, Can. Ent., Vol. XLV, p. 36, under the name of *T. sladeni*.

Habitat: Khasia Hills, Assam, India.

#### EXPLANATION OF FIGURES.

a. *Thrinchostoma sladeni* Ckll., ♂, 5th ventral segment.

b. *Thrinchostoma assamensis*, n. sp., ♂, 5th ventral segment.

#### THE TYPE OF *DELPHAX* FABR. AND *LIBURNIA* STAL.

BY E. BERGROTH, TURTOLA, FINLAND.

In his recently published "Contribution Toward a Monograph of the Delphacidae of North and South America," Mr. D. L. Crawford discusses the use of the name *Delphax* by different authors, and correctly states that *Delphax crassicornis* Fabr. is the type of both *Delphax* Fabr. and *Aræopus* Spin., and that *Aræopus* consequently is a synonym of *Delphax*. He then proceeds to say: "In 1866 Stal (Hemipt. Africana, Vol. IV, p. 178) further complicated matters by restricting the name *Delphax* to *D. clavicornis*, which he erroneously supposed to be the type." In the cited place Stal does not at all speak of *Delphax*, but in the cited work and volume, p. 175, he expressly states: "*Delphax* Fabr., Stal = *Aræopus* Spin."